NWS FORM E-5 (11-88) **(PRES. by NWS Instruction 10-924)** **U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE**	HYDROLOGIC SERVICE AREA (HSA) **WFO Jackson, Mississippi**
MONTHLY REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH **May** YEAR **2014**
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE DATE **06/13/14**

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

☐ **An X inside this box indicates that no river flooding occurred within this hydrologic service area.**

Synopsis...

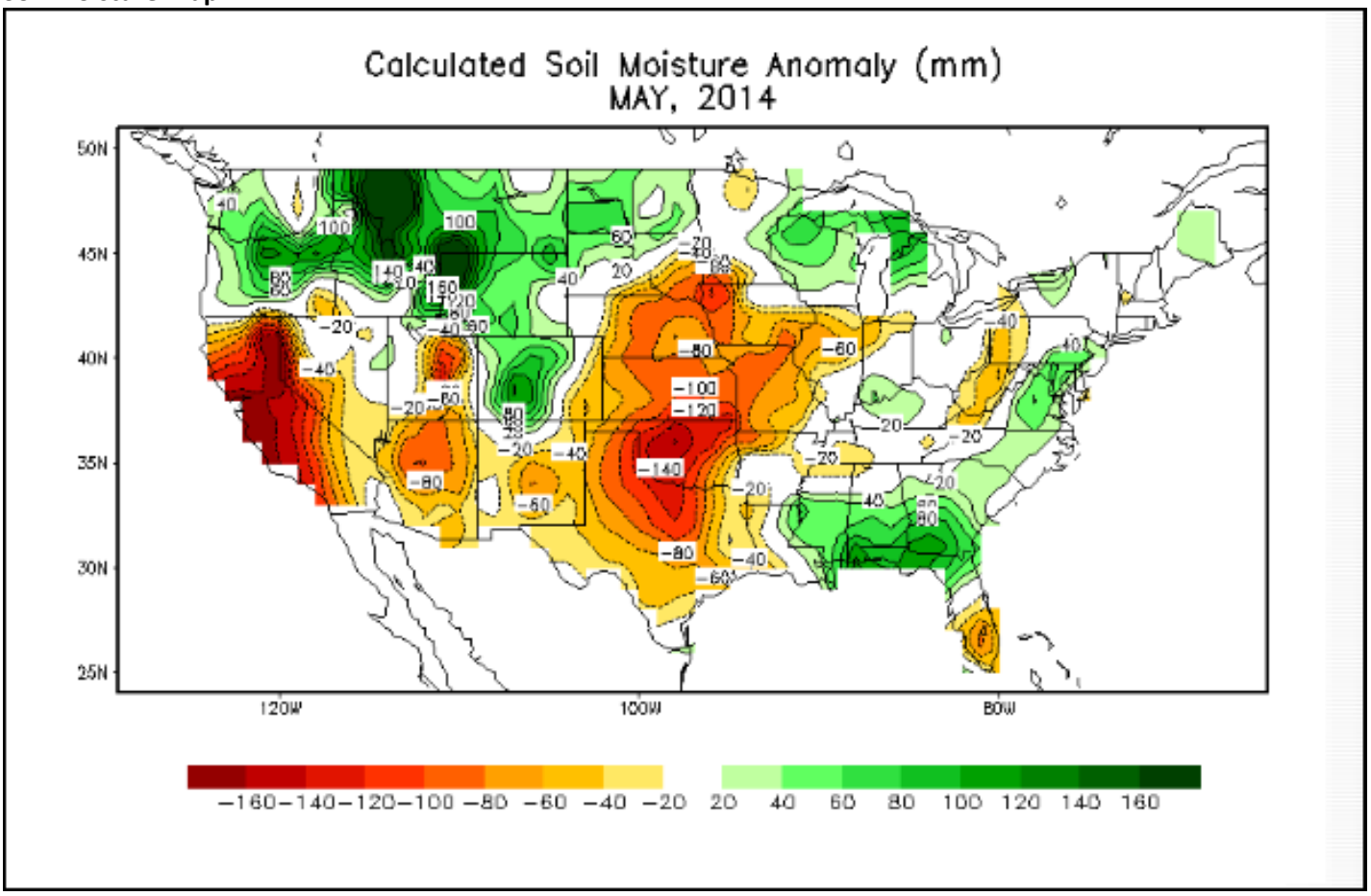
May rainfall was above normal across much of southern and western portions of the Jackson, MS Hydrologic Service Area (HSA). Much of this rainfall occurred between the 9th and 15th and 28th and 31st of the month. The Jackson Metro received most of its monthly rainfall, 3 to 6 inches, from late on the 27th into the morning of the 28th. Rainfall was mostly below normal across the north, northeast, and eastern portions of Mississippi where amounts ranged from 40 to 75 percent of normal. On the average, temperatures were slightly below normal for the month. All Automated Surface Observations Sites (ASOS) ranged from 0.2 degrees below normal at Meridian to 1.4 degrees at Tallulah-Vicksburg.

The month started off with high pressure situated over the southeastern states through the 5th. High pressure shifted east of Mississippi on the 6th allowing strong southerly flow to return across the region. This brought very warm and humid conditions to the area. By early on the 9th, a cold front approached from Texas helping to destabilize the atmosphere across the ARKLAMISS region. A few scattered showers developed during the day. By late on the 9th, a weak boundary set up along the Louisiana Coast. A combination of the warm, humid air and the boundary helped to trigger heavy rainfall, 1 to 4 inches, across southern portions of the HSA through the morning of the 10th. Scattered showers and thunderstorms continued through the 12th. A slow-moving cold front moved across the area on the 13th and 14th bringing from 0.25 to 1.5 inches of rainfall to most locations. Cool Canadian air settled in behind the front on the 15th and 16th, bringing unseasonably cool conditions. High pressure dominated the region through the 26th.

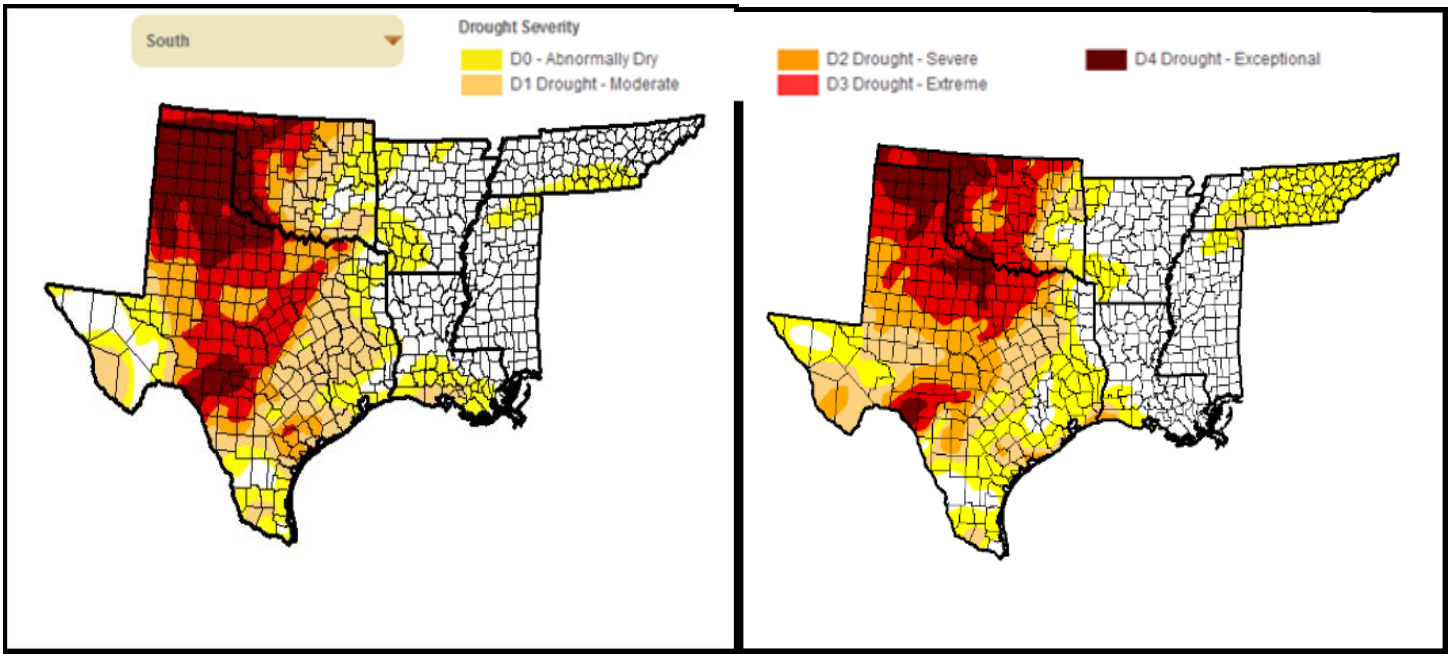
The HSA was in a very wet pattern through the end of the month. An upper level low pressure system slowly drifted eastward into the region through the 30th and slowly began to retrograde back to the west on the 31st. From late on the 27th to the early morning of the 29th, 3 to 6 inches of rainfall fell across portions of Hinds, Rankin, and Madison Counties in Mississippi. From late on the 28th and into the morning of the 29th, 3 to 6 inches of rainfall fell from Concordia Parish, LA to Jefferson County, MS. Flash flooding was reported across both of these areas. Over all, rainfall during this period ranged from 1 to 6.5 inches.

River and Soil Conditions…

Soil Moisture Map:



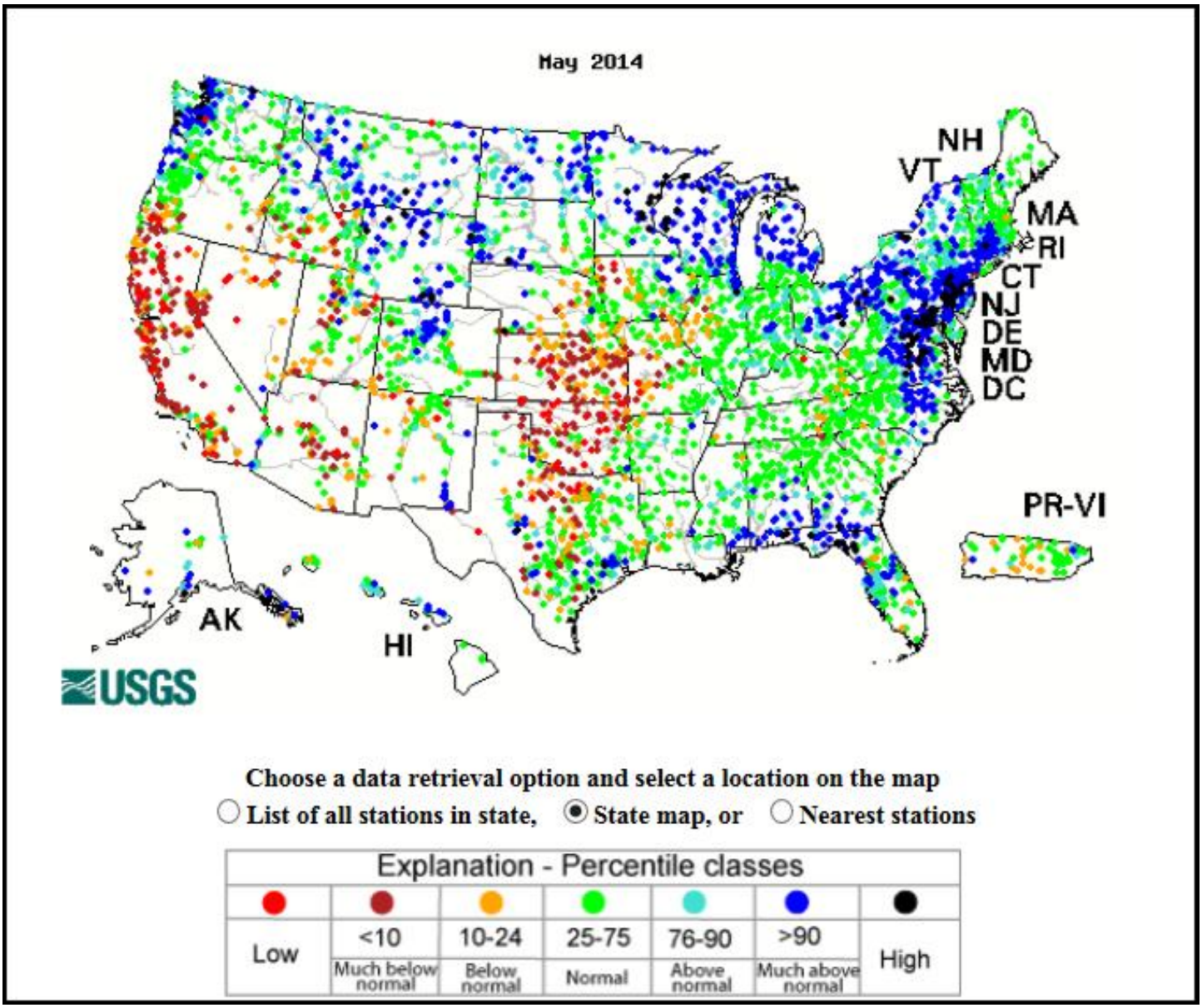
Drought Comparison:



Apr. 29, 2014 **June 3, 2014**

Streamflow:

The United States Geological Survey's (USGS) May 2014 river streamflow records were compared with all historical May streamflow records. The May streamflow was above normal across the Upper Pearl River Basin and portion of the Upper Chickasawhay Basin. Streamflow was near normal across the remainder of the HSA.



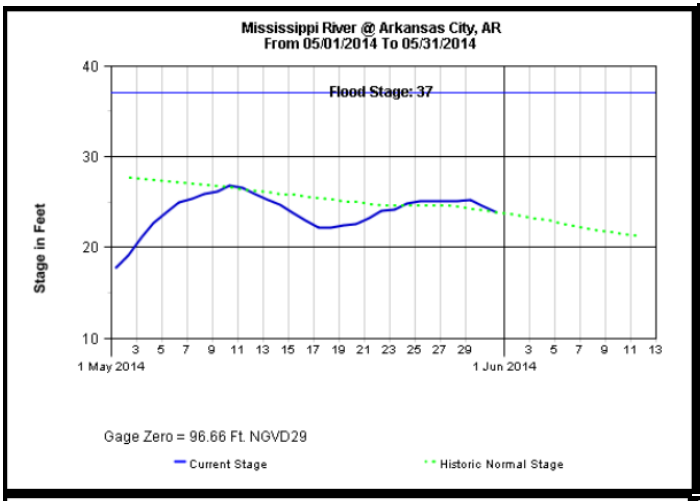
River Conditions:

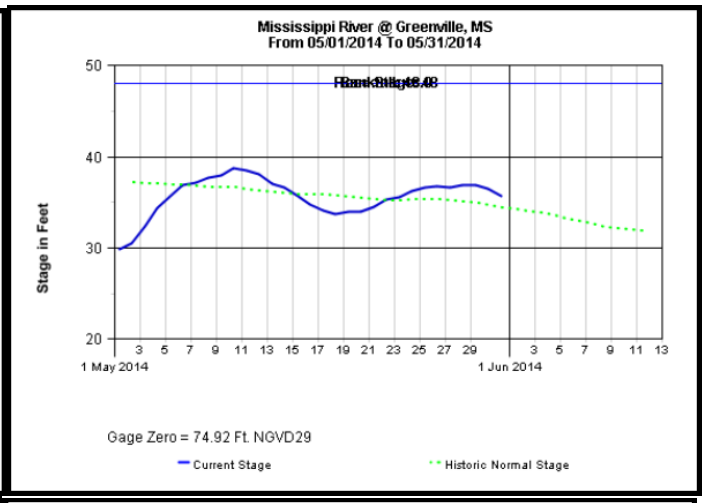
Heavy rainfall during the last several days of the month of April produced minor flooding during last days of April and early May. The Upper Pearl, Middle Big Black, Noxubee and the Upper Chickasawhay river systems continued to be in minor flood for the first several days of May. Rivers within most of the other river systems were either falling or remained steady during this time period. Minor rises occurred on many of the rivers in the HSA during the middle and the last several days of the month due to moderate to heavy rainfall. The Mississippi River rose during the first two weeks of the month to near or above historical normal river stages and remained at or above for much of the month.

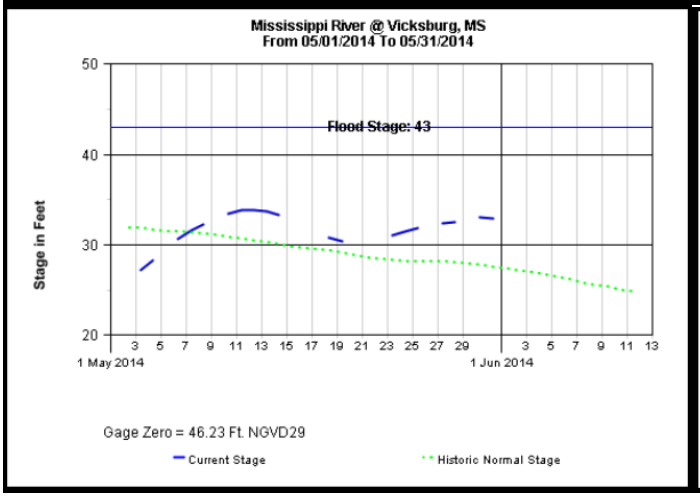
Climatic Outlook and Flood Potential:
The climatic outlook favors above normal temperatures over the next 3 months. As for precipitation, the outlook shows below normal rainfall south and west of a line from Greenville to Waynesboro Mississippi while to the east and northeast of this line there are equal chances of above, below, and normal rainfall. Based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

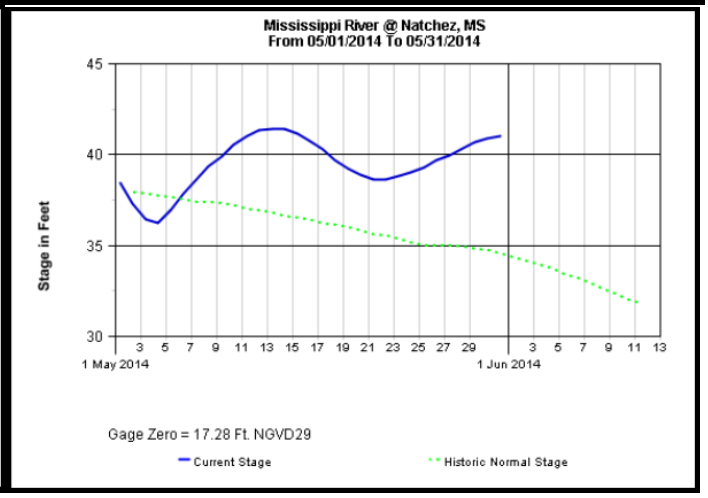
Pearl River System: Average.
Yazoo River System: Average.
Big Black River System: Average.
Homochitto River System: Average.
Pascagoula River System: Average.
Northeast LA and Southeast AR: Average.
Tombigbee River System: Average.
Mississippi River: Average.

Mississippi River Plots May 2014
Plots courtesy of the United States Army Corps of Engineers









Monthly Preliminary High and Low Stages:

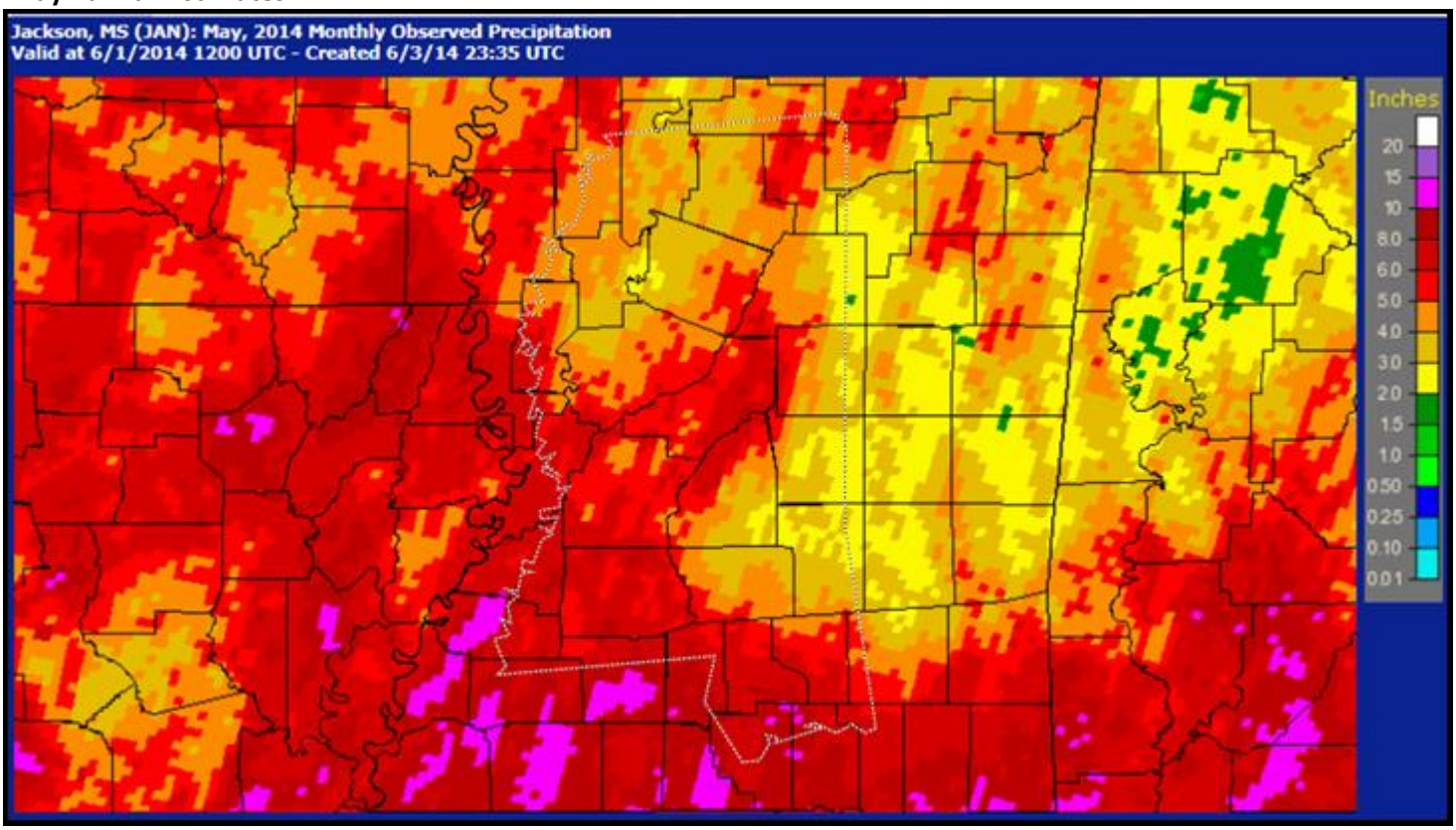
Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	26.88	5/10	17.85	5/01
Greenville	48	38.75	5/10	29.91	5/01
Vicksburg	43	33.95	5/11	26.98	5/02
Natchez	48	41.45	4/12	36.22	5/04

Rainfall for the Month of May:

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on April 30th until 7 am on May 31st were:

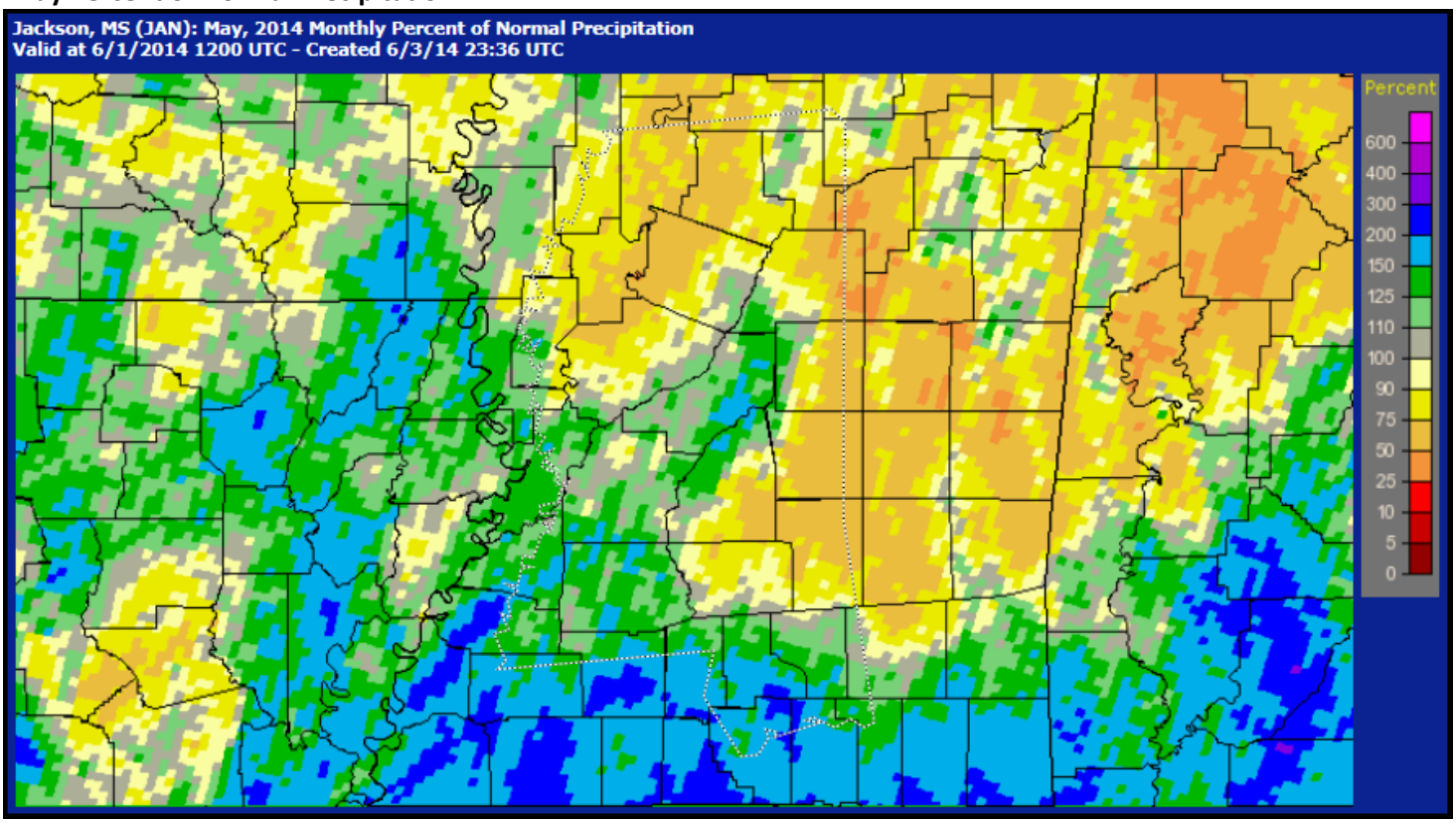
9.67 Inches at Natchez, MS; 9.27 inches at Portland, AR; 8.81 inches at Lake Providence, LA; 7.89 inches at Meadville, MS; 7.40 inches at Sumrall, MS; 7.31 inches at Meadville 5SE, MS; 7.05 inches at St. Joseph, LA; 6.99 inches Vicksburg, MS; 6.86 inches at Bastrop, LA; 6.72 inches at Oakley Ag Exp Station, MS; 6.30 inches at Cleveland, MS; 6.29 inches at Columbia and Purvis, MS; 6.04 inches at Duncan, MS.

May Rainfall Estimates:



Note: Observer rainfall and MPE may differ due to time differences.

May Percent of Normal Precipitation:



Note: Observer rainfall and MPE may differ due to time differences.

May Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2014 Rainfall	2014 Departure from Normal
Jackson (KJAN)	6.38	+2.00	31.60	+7.49
Meridian (KMEI)	2.60	-1.90	31.72	+6.29
Greenville (KGLH)	5.25	+0.34	24.13	-0.13
Greenwood (KGWO)	3.14	-1.81	23.12	-0.21
Hattiesburg (KHBG)	5.97	+0.99	28.48	+1.94
Vicksburg (KTVR)	3.93	-1.03	28.73	+3.03

Total Flood Warning products issued: 1
Total Flood Statement products issued: 38
Total Flood Advisories MS River: 0
Daily Climate and Ag WX Products (AGO'S) issued: 31
Daily CoCoRaHS Rainfall Products (LCO'S) issued: 31
Daily River and Lake Summary Products (RVD'S) issued: 31

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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District